

CLMPTO  
LWB / 4/2/03

1. Method for implementing channel changes from a current plan to a new predetermined plan in a cellular network comprising a plurality of cells, each cell corresponding to at least one equipment, to which a channel may be allocated for communicating signals to and from mobile end stations in the cell; each equipment in the network being adapted for receiving channel change information; blocking operation; performing a channel change according to the predetermined new channel plan and enabling operation; the method comprising the steps of:
  - initially selecting at least one start cell in the cellular network;
  - defining a first group of cells (1) comprising only the start cell(s) (12),
  - blocking equipment that shall be changed in the first group of cells (13),
  - performing a sub-routine carrying out the following steps:
    - identifying a second group of cells (2) not identified previously and having a cell border being adjacent the first group of cells (1, 14),
    - blocking equipment that shall be changed in the second group of cells (2, 15) while performing changes from the current cell plan to the new cell plan on equipment in the first group of cells (1, 16),
    - enabling the first group of cells (1, 17),
  - repeating this procedure with a new first group of cells being equal to the second group of cells (1:=2) until all cells have been changed (18, 19).

2. Method for implementing channel changes from a current plan to a new predetermined plan in a cellular network comprising a plurality of cells, each cell corresponding to at least one equipment, in which a channel may be allocated for communicating signals to and from mobile end stations in the cell;  
  
each equipment in the network being adapted for receiving channel change information; blocking operation; performing a channel change according to the predetermined new channel plan and enabling operation, the method comprising the steps of  
  
defining a consecutive equipment number order and selecting an initial order number (21);  
  
setting a selected equipment number equal to the initial order number (22);  
  
performing a sub-routine wherein the following steps are carried out  
  
- selecting equipment with selected order number;  
  
- blocking the equipment or equipments with the selected order number that shall be changed (24);  
  
- changing channel in selected equipments according to the new cell plan while marking the channel or channels to be used under the new cell plan (25) while blocking the equipments presently using the marked channels under the current cell plan (26);  
  
- enabling selected equipment or equipments (27);  
  
repeating the routine setting the selected order number equal with the subsequent order number (29) until no order numbers are left (28).

3. Method for implementing channel changes from a current plan to a new predetermined plan in a cellular network comprising a plurality of cells, each cell corresponding to at least one equipment, in which a channel may be allocated for communicating signals to and from mobile end stations in the cell; each equipment in the network being adapted for receiving channel change information; blocking operation; performing a channel change according to the predetermined new channel plan and enabling operation, the method comprising the steps of
  - defining a consecutive channel number order for the current cell plan and selecting an initial order number (31);
  - setting a selected channel number equal to the initial order number (32);
  - performing a sub-routine wherein the following steps are carried out
    - selecting the equipment or equipments having a channel with the selected order number under the current cell plan (33);
    - blocking selected equipment that shall be changed (34);
    - changing channel according to the new plan in selected equipments (35) while marking the channel or channels changed to and blocking the equipments presently using the marked channels under the current cell plan (36);
    - enabling selected equipments (37);
  - repeating the routine setting the selected order number equal with the subsequent order number (39) until no order numbers are left (38).

4. Method for implementing channel changes from a current plan to a new predetermined plan in a cellular network comprising a plurality of cells, each cell corresponding to at least one equipment, in which a channel may be allocated for communicating signals to and from mobile end stations in the cell; each equipment in the network being adapted for receiving channel change information; blocking operation; performing a channel change according to the predetermined new channel plan and enabling operation, the method comprising the steps of
  - defining a consecutive channel number order for the new cell plan and defining an initial order number (31b);
  - setting a selected channel number equal to the initial order number (32);
  - performing a sub-routine wherein the following steps are carried out
    - selecting the equipment or equipments getting a channel with the selected order number under the new cell plan (33b);
    - blocking selected equipment that shall be changed (34);
    - changing channel according to the new plan in selected equipments (35) while marking the channel or channels changed to and blocking the equipments presently using the marked channels under the current cell plan (36);
    - enabling selected equipments (37);
  - repeating the routine setting the selected order number equal with the subsequent order number (39) until no order numbers are left (38).
5. Method for implementing channel changes from a current plan to a new predetermined plan in a cellular network comprising a plurality of cells, each cell

corresponding to at least one equipment, in which a channel may be allocated for communicating signals to and from mobile end stations in the cell;

each equipment in the network being adapted for receiving channel change information; blocking operation; performing a channel change according to the predetermined new channel plan and enabling operation, the method comprising the steps of

selecting a start equipment or channel (41, 42)

performing a sub-routine wherein the following steps are carried out

- blocking selected equipment that shall be changed (43),
- changing channel in selected equipments according to new cell plan, while marking the channel or channels changed to and blocking the equipments presently using the marked channels under the current cell plan (44, 45),
- enabling selected equipments (46),

repeating, until all channels have been changed, the above subroutine on an equipment that is presently blocked; and if no equipments are blocked then selecting another equipment that shall be changed (47, 48).

6. {AMENDED} Method for implementing channel changes from a current to a new cell plan and being adapted to carried out prior to or in combination with the methods according to [any preceding] claim 1, wherein the following steps are carried out:

defining an initial group of equipments comprising equipments that shall not be changed and equipments that shall be changed to a channel which is not used under the current cell plan [(111);

blocking equipments that shall be changed in initial group [(112)];

performing channel changes on equipment in initial group [(113)];

enabling equipments in initial group of equipments [(114)]; and

excluding equipments from initial group from being processed further [(115)].

7. {AMENDED} Method for implementing channel changes from a current to a new cell plan according to [any of the above claims] claim 1, involving that at least two of the methods according to [any of the above claims] claim 1 are carried out for testing purposes, whereby the results appearing from the comparative tests are used to determine which channel plan change according to the respective methods should be used to implement the given channel plan change.

-- 8. {NEW} Method for implementing channel changes from a current to a new cell plan and being adapted to carried out prior to or in combination with the methods according to claim 2, wherein the following steps are carried out:

defining an initial group of equipments comprising equipments that shall not be changed and equipments that shall be changed to a channel which is not used under the current cell plan;

blocking equipments that shall be changed in initial group;

performing channel changes on equipment in initial group;

enabling equipments in initial group of equipments; and

excluding equipments from initial group from being processed further.

-- 9. {NEW} Method for implementing channel changes from a current to a new cell plan and being adapted to carried out prior to or in combination with the methods according to claim 3, wherein the following steps are carried out:

defining an initial group of equipments comprising equipments that shall not be changed and equipments that shall be changed to a channel which is not used under the current cell plan;

blocking equipments that shall be changed in initial group;

performing channel changes on equipment in initial group;

enabling equipments in initial group of equipments; and

excluding equipments from initial group from being processed further.

10. {NEW} Method for implementing channel changes from a current to a new cell plan and being adapted to carried out prior to or in combination with the methods according to claim 4, wherein the following steps are carried out:

defining an initial group of equipments comprising equipments that shall not be changed and equipments that shall be changed to a channel which is not used under the current cell plan;

blocking equipments that shall be changed in initial group;

performing channel changes on equipment in initial group;

enabling equipments in initial group of equipments; and

excluding equipments from initial group from being processed further.

11. {NEW} Method for implementing channel changes from a current to a new cell plan and being adapted to carried out prior to or in combination with the methods according to claim 5, wherein the following steps are carried out:

defining an initial group of equipments comprising equipments that shall not be changed and equipments that shall be changed to a channel which is not used under the current cell plan;

blocking equipments that shall be changed in initial group;

performing channel changes on equipment in initial group;

enabling equipments in initial group of equipments; and

excluding equipments from initial group from being processed further.

12. {NEW} Method for implementing channel changes from a current to a new cell plan according to claim 2, involving that at least two of the methods according to claim 2 are carried out for testing purposes, whereby the results appearing from the comparative tests are used to determine which channel plan change according to the respective methods should be used to implement the given channel plan change.

13. {NEW} Method for implementing channel changes from a current to a new cell plan according to claim 3, involving that at least two of the methods according to claim 3 are carried out for testing purposes, whereby the results appearing from the comparative tests are used to determine which channel plan change according to the respective methods should be used to implement the given channel plan change.

14. {NEW} Method for implementing channel changes from a current to a new cell plan according to claim 4, involving that at least two of the methods according to claim 4 are carried out for testing purposes, whereby the results appearing from the comparative tests are used to determine which channel plan change according to the respective methods should be used to implement the given channel plan change.

15. {NEW} Method for implementing channel changes from a current to a new cell plan according to claim 5, involving that at least two of the methods according to claim 5 are carried out for testing purposes, whereby the results appearing from the comparative tests are used to determine which channel plan change according to the respective methods should be used to implement the given channel plan change.

16. {NEW} Method for implementing channel changes from a current to a new cell plan according to claim 6, involving that at least two of the methods according to claim 6 are carried out for testing purposes, whereby the results appearing from the comparative tests are used to determine which channel plan change according to the respective methods should be used to implement the given channel plan change.